# **Listing of Claims:**

This listing of claims replaces all prior versions and listings of claims in the application.

1-22. Canceled.

23. (Currently Amended) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising an amylin or amylin

agonist <u>analogue</u> effective to treat obesity in said human subject, wherein the amount of the amylin or amylin agonist administered in said composition is about 0.01 mg to about 5 mg per day, wherein said composition is not administered in conjunction with another obesity relief agent, and wherein said human subject is in need of treatment for obesity[[.]], wherein the amylin agonist analogue comprises an amino acid sequence of:

 $\frac{{}^{1}A_{1}-X-Asn-Thr-{}^{5}Ala-Thr-Y-Ala-Thr-{}^{10}Gln-Arg-Leu-B_{1}-Asn-{}^{15}Phe-Leu-C_{1}-D_{1}-E_{1}-{}^{20}F_{1}-G_{1}-Asn-H_{1}-Gly-{}^{25}Pro-I_{1}-Leu-Pro-J_{1}-{}^{30}Thr-K_{1}-Val-Gly-Ser-{}^{35}Asn-Thr-Tyr-Z (SEQ ID NO:14)$ 

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $D_1$  is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu

 $J_1$  is Ser, Pro or Thr;

 $K_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is

Leu,  $I_1$  is Val,  $J_1$  is Pro, and  $K_1$  is Asn; then one or more  $A_1$  to  $K_1$  is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy, and wherein the amylin agonist analogue is not  $^{25,28,29}$ Pro-h-amylin (SEQ ID NO:12).

- 24. Canceled.
- 25. (Withdrawn and Currently Amended) A method according to claim 24 wherein said amylin agonist analogue is selected from the group consisting of <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:10), and <sup>18</sup>Arg<sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:8).
  - 26. Canceled.
- 27. (Previously presented) The method according to claim 23 wherein said composition is administered subcutaneously.
- 28. (Withdrawn) A method according to claim 26 wherein said amylin agonist analogue is administered subcutaneously.
- 29. (Previously presented) The method according to claim 23 wherein said composition is administered from 1 to 4 times per day.
  - 30. Canceled.
- 31. (Previously presented) The method according to claim 23 wherein said composition is administered before a meal.
- 32. (Previously presented) The method according to claim 23 wherein said composition is administered within about 15 minutes of a meal.
- 33. (Currently Amended) A method of treating obesity in a human subject, said method consisting of administering to said subject an amount of a composition effective to treat obesity in

said human subject, said composition comprising an obesity relief agent consisting of an amylin or an amylin agonist analogue and a pharmaceutically acceptable carrier, wherein the amount of said amylin or amylin agonist administered in said composition is about 0.01 mg to about 5 mg per day, and wherein said human subject is in need of treatment for obesity[[.]], wherein the amylin agonist analogue comprises an amino acid sequence of:

 $\frac{{}^{1}A_{1}-X-Asn-Thr-{}^{5}Ala-Thr-Y-Ala-Thr-{}^{10}Gln-Arg-Leu-B_{1}-Asn-{}^{15}Phe-Leu-C_{1}-D_{1}-E_{1}-{}^{20}F_{1}-G_{1}-Asn-H_{1}-Gly-{}^{25}Pro-I_{1}-Leu-Pro-J_{1}-{}^{30}Thr-K_{1}-Val-Gly-Ser-{}^{35}Asn-Thr-Tyr-Z (SEQ ID NO:14)$ 

### wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $\underline{D_1}$  is His or Arg;

 $E_1$  is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

 $G_1$  is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu

J<sub>1</sub> is Ser, Pro or Thr;

 $K_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Pro, and K<sub>1</sub> is Asn; then one or more A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy, and wherein the amylin agonist analogue is not <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:12).

34. (Canceled)

.

35. (Withdrawn and Currently Amended) A method according to claim 34 wherein said amylin agonist analogue is selected from the group consisting of <sup>25,28,29</sup>Pro h amylin (SEQ ID NO:10) and <sup>18</sup>Arg<sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:8).

## 36. Canceled

- 37. (Previously presented) The method according to claim 33 wherein said composition is administered subcutaneously.
- 38. (Previously presented) The method according to claim 33 wherein said composition is administered from 1 to 4 times per day.
- 39. (Previously presented) The method according to claim 33 wherein said composition is administered before a meal.

40-67. Canceled.

- 68. Canceled
- 69. (Withdrawn) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO: 15):

 $^{1}A_{1}-X-Asn-Thr-^{5}Ala-Thr-Y-Ala-Thr-^{10}Gln-Arg-Leu-B_{1}-Asn-^{15}Phe-Leu-C_{1}-D_{1}-E_{1}-^{20}F_{1}-G_{1}-Asn-H_{1}-Gly-^{25}Pro-I_{1}-Leu-Pro-J_{1}-^{30}Thr-K_{1}-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z$  wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $D_1$  is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu

J<sub>1</sub> is Ser, Pro or Thr;

 $K_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when

 $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is Arg,  $E_1$  is Ser,  $F_1$  is Ser,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Val,  $J_1$ is Pro, and  $K_1$  is Asn; or

 $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is His,  $E_1$  is Ser,  $F_1$  is Asn,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Val,  $J_1$  is Ser and  $K_1$  is Asn;

then one or more of  $A_1$  to  $K_1$  is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

70. (Withdrawn) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO: 16):

 $^{1}$ A<sub>1</sub>-X-Asn-Thr- $^{5}$ Ala-Thr-Y-Ala-Thr $^{10}$ Gln-Arg-Leu-B<sub>1</sub>-Asn- $^{15}$ Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>- $^{20}$ F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly- $^{25}$ Pro-I<sub>1</sub>-Leu-Pro-J<sub>1</sub>- $^{30}$ Thr-K<sub>1</sub>-Val-Gly-Ser- $^{35}$ Asn-Thr-Tyr-Z wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

 $B_1$  is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $D_1$  is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

 $H_1$  is Phe, Leu or Tyr;

I<sub>1</sub> is Ala or Pro;

J<sub>1</sub> is Ile, Val, Ala or Leu;

 $K_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is Arg,  $E_1$  is Ser,  $F_1$  is Ser,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Pro,  $J_1$ is Val, and  $K_1$  is Asn; then one or more  $A_1$  to  $K_1$  is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

71. (Withdrawn) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO: 17):

 $^{1}$ A<sub>1</sub>-X-Asn-Thr- $^{5}$ Ala-Thr-Y-Ala-Thr $^{10}$ Gln-Arg-Leu-B<sub>1</sub>-Asn- $^{15}$ Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>- $^{20}$ F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly- $^{25}$ Pro-I<sub>1</sub>-Leu-Pro-Pro- $^{30}$ Thr-J<sub>1</sub>-Val-Gly-Ser- $^{35}$ Asn-Thr-Tyr-Z wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

 $B_1$  is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $D_1$  is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu;

 $J_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and

provided that when  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is Arg,  $E_1$  is Ser,  $F_1$  is Ser,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Val,  $J_1$  is Asn; then one or more of  $A_1$  to  $J_1$  is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

### 72. Canceled

73. (Withdrawn) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO:15):

 $^1A_1\text{-X-Asn-Thr-}^5Ala\text{-Thr-Y-Ala-Thr}^{10}Gln\text{-Arg-Leu-}B_1\text{-Asn-}^{15}Phe\text{-Leu-}C_1\text{-}D_1\text{-}E_1\text{-}^{20}F_1\text{-}G_1\text{-}Asn\text{-}H_1\text{-}Gly\text{-}}^{25}Pro\text{-}I_1\text{-}Leu\text{-}J_1\text{-}Pro\text{-}}^{30}Thr\text{-}K_1\text{-}Val\text{-}Gly\text{-}Ser\text{-}}^{35}Asn\text{-}Thr\text{-}Tyr\text{-}Z$  wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $D_1$  is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

 $H_1$  is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu

 $J_1$  is Ser, Pro, Leu, Ile or Thr;

 $K_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when

- (a)  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is Arg,  $E_1$  is Ser,  $F_1$  is Ser,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Val,  $J_1$  is Pro, and  $K_1$  is Asn; or
- (b)  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is His,  $E_1$  is Ser,  $F_1$  is Asn,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Val,  $J_1$  is Ser and  $K_1$  is Asn;

then one or more of  $A_1$  to  $K_1$  is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

74. (Withdrawn) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO: 16):

 $^1$ A<sub>1</sub>-X-Asn-Thr- $^5$ Ala-Thr-Y-Ala-Thr $^{10}$ Gln-Arg-Leu-B<sub>1</sub>-Asn- $^{15}$ Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>- $^{20}$ F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly- $^{25}$ -I<sub>1</sub>-J<sub>1</sub>-Leu-Pro-Pro- $^{30}$ Thr-K<sub>1</sub>-Val-Gly-Ser- $^{35}$ Asn-Thr-Tyr-Z wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $D_1$  is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ala or Pro;

J<sub>1</sub> is Ile, Val, Ala or Leu;

 $K_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is Arg,  $E_1$  is Ser,  $F_1$  is Ser,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Pro,  $I_1$  is Val, and  $I_1$  is Asn; then one or more  $I_1$  to  $I_2$  is a D-amino acid and  $I_3$  is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

75. (Withdrawn) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ NO: 17):

 $^1A_1$ -X-Asn-Thr- $^5$ Ala-Thr-Y-Ala-Thr $^{10}$ Gln-Arg-Leu-B $_1$ -Asn- $^{15}$ Phe-Leu-C $_1$ -D $_1$ -E $_1$ - $^{20}$ F $_1$ -G $_1$ -Asn-H $_1$ -Gly- $^{25}$ Pro-I $_1$ -Leu-Pro-Pro- $^{30}$ Thr-J $_1$ -Val-Gly-Ser- $^{35}$ Asn-Thr-Tyr-Z wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;
D<sub>1</sub> is His or Arg;
E<sub>1</sub> is Ser or Thr;
F<sub>1</sub> is Ser, Thr, Gln or Asn;
G<sub>1</sub> is Asn, Gln or His;
H<sub>1</sub> is Phe, Leu or Tyr;
I<sub>1</sub> is Ile, Val, Ala or Leu;
J<sub>1</sub> is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and

provided that when  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is Arg,  $E_1$  is Ser,  $F_1$  is Ser,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Val,  $J_1$  is Asn; then one or more of  $A_1$  to  $J_1$  is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

76. (Previously presented) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition effective to treat obesity in said human subject, wherein said human subject is in need of treatment for obesity, said composition comprising a peptide having an amino acid sequence of:

 $^{1}$ A<sub>1</sub>-X-Asn-Thr- $^{5}$ Ala-Thr-Y-Ala-Thr- $^{10}$ Gln-Arg-Leu-B<sub>1</sub>-Asn- $^{15}$ Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>- $^{20}$ F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly- $^{25}$ Pro-I<sub>1</sub>-Leu-Pro-J<sub>1</sub>- $^{30}$ Thr-K<sub>1</sub>-Val-Gly-Ser- $^{35}$ Asn-Thr-Tyr-Z (SEQ ID NO:14) wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;
I<sub>1</sub> is Ile, Val, Ala or Leu
J<sub>1</sub> is Ser, Pro or Thr;
K<sub>1</sub> is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub>is Pro, and K<sub>1</sub> is Asn; then one or more A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy, wherein said amount is effective to treat obesity and wherein said composition is not administered in conjunction with another obesity relief agent.

77. (Withdrawn) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of (SEQ ID NO:15):

 $^{1}$ A<sub>1</sub>-X-Asn-Thr- $^{5}$ Ala-Thr-Y-Ala-Thr- $^{10}$ Gln-Arg-Leu-B<sub>1</sub>-Asn- $^{15}$ Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>- $^{20}$ F<sub>1</sub>- G<sub>1</sub>-Asn-H<sub>1</sub>-Gly- $^{25}$ Pro-I<sub>1</sub>-Leu-J<sub>1</sub>-Pro- $^{30}$ Thr-K<sub>1</sub>-Val-Gly-Ser- $^{35}$ Asn-Thr-Tyr-Z wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

 $B_1$  is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $D_1$  is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

 $H_1$  is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu

J<sub>1</sub> is Ser, Pro, Leu, Ile or Thr;

 $K_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when

- (a)  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is Arg,  $E_1$  is Ser,  $F_1$  is Ser,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Val,  $J_1$ is Pro, and  $K_1$  is Asn; or
- (b)  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is His,  $E_1$  is Ser,  $F_1$  is Asn,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Val,  $J_1$  is Ser and  $K_1$  is Asn;

then one or more of  $A_1$  to  $K_1$  is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

78. (Withdrawn) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of (SEQ ID NO:16):

 $^{1}A_{1}-X-Asn-Thr-^{5}Ala-Thr-Y-Ala-Thr-^{10}Gln-Arg-Leu-B_{1}-Asn-^{15}Phe-Leu-C_{1}-D_{1}-E_{1}-^{20}F_{1}-G_{1}-Asn-H_{1}-Gly-^{25}I_{1}-J_{1}-Leu-Pro-Pro-^{30}Thr-K_{1}-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z$  wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

 $B_1$  is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $D_1$  is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ala or Pro;

J<sub>1</sub> is Ile, Val, Ala or Leu;

 $K_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a

disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is Arg,  $E_1$  is Ser,  $F_1$  is Ser,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Pro,  $J_1$  is Val, and  $K_1$  is Asn; then one or more  $A_1$  to  $K_1$  is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

79. (Withdrawn) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of (SEQ ID NO:17):

 $^1A_1$ -X-Asn-Thr- $^5$ Ala-Thr-Y-Ala-Thr- $^{10}$ Gln-Arg-Leu-B $_1$ -Asn- $^{15}$ Phe-Leu-C $_1$ -D $_1$ -E $_1$ - $^{20}$ F $_1$ -G $_1$ -Asn-H $_1$ -Gly- $^{25}$ Pro-I $_1$ -Leu-Pro-Pro- $^{30}$ Thr-J $_1$ -Val-Gly-Ser- $^{35}$ Asn-Thr-Tyr-Z wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

 $B_1$  is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

 $D_1$  is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub>is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu;

 $J_1$  is Asn, Asp or Gln;

X and Yare independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and

provided that when  $A_1$  is Lys,  $B_1$  is Ala,  $C_1$  is Val,  $D_1$  is Arg,  $E_1$  is Ser,  $F_1$  is Ser,  $G_1$  is Asn,  $H_1$  is Leu,  $I_1$  is Val and  $J_1$  is Asn; then one or more of  $A_1$  to  $J_1$  is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, aralkylamino,

alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

80. (Currently Amended) The method according to claim 23 wherein the amount of the amylin or amylin agonist administered is from about 30  $\mu$ g/dose to about 300  $\mu$ g/dose.

### 81. Canceled.

- 82. (Currently Amended) The method according to claim 33 wherein said amylin or amylin agonist is administered at a dose from about 30  $\mu$ g/dose to about 300  $\mu$ g/dose.
  - 83. Canceled.
- 84. (Currently Amended) The method according to claim 76 wherein said peptide is administered at a dose from about 30  $\mu$ g/dose to about 300  $\mu$ g/dose.
- 85. (Withdrawn and Currently Amended) The method according to claim 77 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.
- 86. (Withdrawn and Currently Amended) The method according to claim 77 wherein said peptide is administered at a dose from about 30 μg/dose to about 300 μg/dose.
- 87. (Withdrawn and Currently Amended) The method according to claim 78 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.
- 88. (Withdrawn and Currently Amended) The method according to claim 78 wherein said peptide is administered at a dose from about 30  $\mu$ g/dose to about 300  $\mu$ g/dose.
- 89. (Withdrawn and Currently Amended) The method according to claim 79 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.

	91. Canceled.
	92. Canceled.
	93. Canceled.
	94. Canceled.
mass ir	95. (Previously presented) The method according to claim 23 wherein said subject has a body ndex of at least 27.0 kg/m <sup>2</sup> .
mass ir	96. (Previously presented) The method according to claim 33 wherein said subject has a body ndex of at least 27.0 kg/m².

97. (Previously presented) The method according to claim 76 wherein said subject has a body

90. (Withdrawn and Currently Amended) The method according to claim 79 wherein said

peptide is administered at a dose from about 30 µg/dose to about 300 µg/dose.

mass index of at least  $27.0 \text{ kg/m}^2$ .